

Appm. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

Listing of Claims:

1 **Claim 1 (currently amended):** An information providing
2 apparatus for acquiring contents data representing a high
3 quality still image from a service providing apparatus capable
4 of storing the contents data and of transmitting the contents
5 data in response to a request from a remote user terminal, and
6 for providing the contents data to the remote user terminal,
7 said information providing comprising:
8 reproducing means for reproducing the contents data;
9 picture data relaying means for relaying still picture
10 data obtained from the contents data reproduced by
11 the reproducing means;
12 moving picture coding means for producing compressed
13 moving picture data using a moving picture coding
14 format and having a high image quality from the
15 still picture data coded using a still picture
16 coding format and obtained from said picture data
17 relaying means, said producing being performed by
18 way of a stepwise image quality complementary type
19 coding system for complementing an image quality in
20 a stepwise manner, and for transmitting the
21 compressed moving picture data to the user terminal
22 to display a still display picture using said moving
23 picture coding format; and

Appl. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

24 control means for determining an area of the still
25 picture data coded into the compressed moving
26 picture data in response to a user selection of a
27 portion of the still display picture made from the
28 remote user terminal, and for notifying the selected
29 area to the moving picture coding means.

1 Claim 2 (previously presented): An information providing
2 apparatus as claimed in claim 1, wherein
3 said control means is capable of producing a control
4 signal used to change the reproducing state of the
5 reproducing means by receiving a manipulation of the
6 user terminal, and is capable of transmitting the
7 control signal to the reproducing means; and wherein
8 the moving picture coding means produces compressed
9 moving picture data from said still picture data,
10 the content of which is sequentially changed by
11 changing a setting condition of a coding process
12 operation.

1 Claim 3 (previously presented): An information providing
2 apparatus as claimed in claim 1, wherein the moving picture
3 coding means also produces audio data having a designated data
4 format from audio data contained in the contents data, and
5 also produces multiplexed AV data by multiplexing the

Appl. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

6 compressed moving data with the audio data, and transmits the
7 multiplexed AV data to the user terminal.

1 **Claim 4 (currently amended):** An information providing
2 apparatus for providing data to a remotely located user
3 terminal in response to a request, comprising:
4 storing means for storing contents data including still
5 picture data;
6 reproducing means for reproducing the contents data;
7 picture data relaying means for relaying the still
8 picture data originated from the contents data
9 reproduced by the reproducing means;
10 moving picture coding means for producing compressed
11 moving picture data coded using a moving picture
12 coding format and having a high image quality from
13 the still picture image data coded using a still
14 picture coding format and by way of a stepwise image
15 quality complementary type coding system for
16 complementing an image quality in a stepwise manner,
17 and for transmitting the compressed moving picture
18 data to the remotely located user terminal for
19 displaying a still display image using said moving
20 picture coding format; and
21 control means for determining an area of still picture
22 data coded into the compressed moving picture data

Appl. No. 09/559,159
Amndt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

23 in response to a user selection of a portion of the
24 still display image made from the remote user
25 terminal, and for notifying the selected area to the
26 moving picture coding means.

1 Claim 5 (previously presented): An information providing
2 apparatus as claimed in claim 4, wherein
3 said control means is also for producing a control signal
4 used to change the reproducing state of the
5 reproducing means by receiving a manipulation of the
6 user terminal, and is further for transmitting the
7 control signal to the reproducing means; and wherein
8 the moving picture coding means produces compressed
9 moving picture data from the still picture data, the
10 content of which is sequentially changed by changing
11 a setting condition of coding process operation.

1 Claim 6 (previously presented): n information providing
2 apparatus as claimed in claim 4, wherein the moving picture
3 coding means also produces audio data having a designated data
4 format from audio data contained in the contents data, and
5 also produces multiplexed AV data by multiplexing the
6 compressed moving picture data with the audio data, and also
7 transmits the multiplexed AV data to the user terminal.

Appl. No. 09/559,159
Amndt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

1 **Claim 7 (currently amended):** An information providing
2 system for acquiring content data from a service providing
3 system and for providing a communication service to a remotely
4 located mobile terminal, wherein the content data represents a
5 high quality still image coded using a still picture coding
6 format, said information providing system comprising:
7 moving picture coding means for producing compressed
8 moving picture data coded using a moving picture
9 coding format from the content data using a stepwise
10 image quality complementary coding system; and
11 transmitting means for transmitting the compressed moving
12 picture data to the mobile terminal, wherein
13 the mobile terminal displays a still display image
14 representing the high quality still image from the
15 compressed moving picture data using said moving
16 picture coding format, such that image processing of
17 the content data is primarily conducted by the
18 information providing system to thereby reduce a
19 processing load and/or a memory requirement on the
20 mobile terminal.

1 **Claim 8 (previously presented):** The system of claim 7,
2 wherein the mobile terminal displays the display image in
3 progressively more detail over some period of time.

Appln. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

1 **Claim 9 (previously presented):** The system of claim 7,
2 wherein the mobile terminal is a mobile terminal capable of
3 displaying compressed moving picture images.

1 **Claim 10 (previously presented):** The system of claim 9,
2 wherein the mobile terminal is a PDA or a portable telephone.

1 **Claim 11 (previously presented):** The system of claim 7,
2 wherein the mobile terminal is a PDA or a portable telephone.

1 **Claim 12 (previously presented):** The system of claim 7,
2 further comprising control means for determining an area of a
3 portion of the display image, wherein the portion is chosen by
4 a user manipulation at the mobile terminal, and wherein the
5 control means provides the determined area to the moving
6 picture coding means.

1 **Claim 13 (currently amended):** An information providing
2 system for acquiring content data from a service providing
3 system and for providing a communication service to a remotely
4 located mobile terminal capable of displaying compressed
5 moving picture data and connected to a communication network,
6 wherein the content data represents a high quality still image
7 coded using a still picture coding format, said information
8 providing system comprising:

Appl. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

9 moving picture coding means for producing compressed
10 moving picture data coded using a moving picture
11 coding format from the content data using a stepwise
12 image quality complementary coding system; and
13 transmitting means for transmitting the compressed moving
14 picture data to the mobile terminal via the
15 communication network such that image processing is
16 conducted at the information providing system to
17 thereby reduce a processing load and/or a memory
18 requirement on the mobile terminal, and wherein
19 the mobile terminal displays a still display image
20 representing the high quality still image from the
21 compressed moving picture data using said moving
22 picture coding format.

1 Claim 14 (previously presented): The system of claim 13,
2 wherein the mobile terminal is a PDA or a portable telephone.

1 Claim 15 (previously presented): The system of claim 13,
2 wherein the mobile terminal displays the still display image
3 in progressively more detail over some period of time.

1 Claim 16 (previously presented): The system of claim 13,
2 further including control means for determining an area of a
3 portion of the display image, wherein the portion is chosen by

Appln No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

4 a user manipulation at the mobile terminal, and wherein the
5 control means provides the determined area to the moving
6 picture coding means, which then produces new compressed
7 moving picture data from the content data using the stepwise
8 image quality complementary coding system, wherein the new
9 compressed moving picture data corresponds to the chosen
10 portion of the display image for displaying the chosen portion
11 on the mobile device in a larger fashion.

1 Claim 17 (currently amended): A system comprising:
2 a mobile terminal including telephone capability for
3 connecting to a telephone network and capable of
4 displaying compressed moving picture data;
5 a service providing system for providing content data
6 representing a high quality still image coded using
7 a still picture coding format as a service; and
8 an information providing system for acquiring the content
9 data from the service providing system and for
10 providing a communication service to the mobile
11 terminal, said information providing system
12 including:
13 moving picture coding means for producing compressed
14 moving picture data coded using a moving
15 picture coding format from the content data for
16 providing compressed moving picture data to the

Appln. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

17 mobile terminal for display on the mobile
18 terminal,
19 transmitting means for transmitting the compressed
20 moving picture data to the mobile terminal,
21 wherein the mobile terminal displays a still
22 display image representing the high quality
23 still image from the compressed moving picture
24 data using said moving picture coding format,
25 control means for determining an area of the still
26 picture data coded into the compressed moving
27 picture data in response to a user selection of
28 a portion of the still display image from the
29 user terminal, and for notifying the selected
30 area to the moving picture coding means,
31 wherein.
32 the moving picture coding means then produces new
33 compressed moving picture data from the content
34 data corresponding to the user selected portion
35 of the display image for displaying the
36 selected portion on the mobile terminal in a
37 larger fashion as a zoomed still image; wherein
38 the information providing system operates such that
39 a primary portion of image processing of the
40 content data is conducted at the information
41 providing system to thereby reduce a processing

Appl. No. 09/559,159
Amdt. Dated September 19, 2005
Reply to Office Action of June 17, 2005

42 load and/or a memory requirement on the mobile
43 terminal.